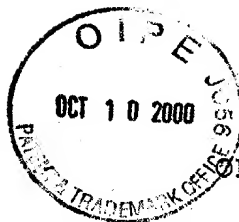


| UNITED STATES OF AMERICA<br>COMBINED DECLARATION AND POWER OF ATTORNEY FOR PATENT APPLICATION                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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|                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| <p>As a below named inventor, I hereby declare that: my residence, post office address and citizenship are as stated below next to my name; that I verily believe that I am the original, first and sole inventor (if only one name is listed below) or a joint inventor (if plural inventors are named) of the subject matter which is claimed and for which a patent is sought on the invention entitled:</p> <p style="text-align: center;"><b>PIEZOELECTRIC ELEMENT</b></p> <p>the specification of which is attached hereto, unless the following box is checked:</p> <p><input checked="" type="checkbox"/> was filed on <u>August 11, 2000</u> as United States patent Application Number or PCT International patent application number <u>09/636,500</u> and was amended on _____ (if any).</p> <p>I hereby state that I have reviewed and understand the contents of the above identified specification, including the claims, as amended by any amendment referred to above.</p> <p>I acknowledge the duty to disclose all information known to be material to patentability in accordance with Title 37, Code of Federal Regulations, §1.56.</p> <p>I hereby claim priority benefits under Title 35, United States Code §119 of any foreign application(s) for patent or inventor's certificate or United States provisional application(s) listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:</p> <p>Prior Foreign or Provisional Application(s)</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>COUNTRY</th> <th>APPLICATION NUMBER</th> <th>DATE OF FILING<br/>(day, month, year)</th> <th>PRIORITY CLAIMED<br/>UNDER 35 U.S.C. 119</th> </tr> </thead> <tbody> <tr> <td>Japan</td> <td>11-229732</td> <td>16 August 1999</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></td> </tr> <tr> <td>Japan</td> <td>11-229733</td> <td>16 August 1999</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></td> </tr> <tr> <td>Japan</td> <td>2000-161829</td> <td>31 May 2000</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></td> </tr> <tr> <td>Japan</td> <td>2000-161830</td> <td>31 May 2000</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></td> </tr> <tr> <td>Japan</td> <td>2000-193899</td> <td>28 June 2000</td> <td>YES <input checked="" type="checkbox"/> NO <input type="checkbox"/></td> </tr> </tbody> </table> <p>I hereby claim the benefit under Title 35, United States Code, §120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, §112, I acknowledge the duty to disclose information which is material to patentability as defined in Title 37, Code of Federal Regulations, §1.56 which became available between the filing date of the prior application and the national or PCT international filing date of this application.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <thead> <tr> <th>UNITED STATES<br/>APPLICATION NUMBER</th> <th>DATE OF FILING<br/>(day, month, year)</th> <th>STATUS<br/>(patented, pending, abandoned)</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table> <p>I hereby appoint customer no. 2352 OSTROLENK, FABER, GERB &amp; SOFFEN, LLP, and the members of the firm, Samuel H. Weiner - Reg. No. 18,510; Jerome M. Berliner - Reg. No. 18,653; Robert C. Faber - Reg. No. 24,322; Edward A. Meilman - Reg. No. 24,735; Stanley H. Lieberstein - Reg. No. 22,400; Steven I. Weisburd - Reg. No. 27,409; Max Moskowitz - Reg. No. 30,576; Stephen A. Soffen - Reg. No. 31,063; James A. Pinder - Reg. No. 30,173; William O. Gray, III - Reg. No. 30,944; Louis C. Dujmich - Reg. No. 30,625 and Douglas A. Miro - Reg. No. 31,643, as attorneys with full power of substitution and revocation to prosecute this application, to transact all business in the Patent &amp; Trademark Office connected therewith and to receive all correspondence.</p> <p>SEND CORRESPONDENCE TO: <b>OSTROLENK, FABER, GERB &amp; SOFFEN, LLP</b> DIRECT TELEPHONE CALLS TO:<br/>1180 AVENUE OF THE AMERICAS<br/>NEW YORK, NEW YORK 10036-8403<br/>CUSTOMER NO. 2352<br/>(212) 382-0700</p> <p>I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.</p> <table border="1" style="width:100%; border-collapse: collapse;"> <tr> <td>FULL NAME OF SOLE OR FIRST INVENTOR<br/><b>Akira ANDO</b></td> <td>INVENTOR'S SIGNATURE<br/><i>Akira Ando</i></td> <td>DATE<br/><u>August 10, 2000</u></td> </tr> <tr> <td colspan="2">RESIDENCE (City and either State or Foreign Country)<br/><b>Omiachiman-shi, Shiga-ken, Japan</b></td> <td>COUNTRY OF CITIZENSHIP<br/><b>Japan</b></td> </tr> <tr> <td colspan="3">POST OFFICE ADDRESS<br/><b>c/o (A170) Intellectual Property Department, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan</b></td> </tr> <tr> <td>FULL NAME OF SECOND JOINT INVENTOR (IF ANY)<br/><b>Masahiko KIMURA</b></td> <td>INVENTOR'S SIGNATURE<br/><i>Masahiko Kimura</i></td> <td>DATE<br/><u>August 11, 2000</u></td> </tr> <tr> <td colspan="2">RESIDENCE (City and either State or Foreign Country)<br/><b>Kusatsu-shi, Shiga-ken, Japan</b></td> <td>COUNTRY OF CITIZENSHIP<br/><b>Japan</b></td> </tr> <tr> <td colspan="3">POST OFFICE ADDRESS<br/><b>c/o (A170) Intellectual 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16 August 1999 | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | Japan | 11-229733 | 16 August 1999 | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | Japan | 2000-161829 | 31 May 2000 | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | Japan | 2000-161830 | 31 May 2000 | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | Japan | 2000-193899 | 28 June 2000 | YES <input checked="" type="checkbox"/> NO <input type="checkbox"/> | UNITED STATES<br>APPLICATION NUMBER | DATE OF FILING<br>(day, month, year) | STATUS<br>(patented, pending, abandoned) |  |  |  | FULL NAME OF SOLE OR FIRST INVENTOR<br><b>Akira ANDO</b> | INVENTOR'S SIGNATURE<br><i>Akira Ando</i> | DATE<br><u>August 10, 2000</u> | RESIDENCE (City and either State or Foreign Country)<br><b>Omiachiman-shi, Shiga-ken, Japan</b> |  | COUNTRY OF CITIZENSHIP<br><b>Japan</b> | POST OFFICE ADDRESS<br><b>c/o (A170) Intellectual Property Department, Murata 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Nagaokakyo-shi, Kyoto-fu 617-8555, Japan</b> |  |  |
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|                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| UNITED STATES<br>APPLICATION NUMBER                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    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|                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| FULL NAME OF SOLE OR FIRST INVENTOR<br><b>Akira ANDO</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | INVENTOR'S SIGNATURE<br><i>Akira Ando</i>      | DATE<br><u>August 10, 2000</u>           |                                                                     |         |                    |                                      |                                         |       |           |                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| RESIDENCE (City and either State or Foreign Country)<br><b>Omiachiman-shi, Shiga-ken, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        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| POST OFFICE ADDRESS<br><b>c/o (A170) Intellectual Property Department, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| FULL NAME OF SECOND JOINT INVENTOR (IF ANY)<br><b>Masahiko KIMURA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  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|                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| RESIDENCE (City and either State or Foreign Country)<br><b>Kusatsu-shi, Shiga-ken, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           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| POST OFFICE ADDRESS<br><b>c/o (A170) Intellectual Property Department, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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| FULL NAME OF THIRD JOINT INVENTOR (IF ANY)<br><b>Takuya SAWADA</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | INVENTOR'S SIGNATURE<br><i>Takuya Sawada</i>   | DATE<br><u>August 10, 2000</u>           |                                                                     |         |                    |                                      |                                         |       |           |                |                                                                     |       |           |                |                                                                     |       |             |             |                                                                     |       |             |             |                                                                     |       |             |              |                                                                     |                                     |                                      |                                          |  |  |  |                                                          |                                           |                                |                                                                                                 |  |                                        |                                                                                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| RESIDENCE (City and either State or Foreign Country)<br><b>Moriyama-shi, Shiga-ken, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          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| POST OFFICE ADDRESS<br><b>c/o (A170) Intellectual Property Department, Murata Manufacturing Co., Ltd., 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             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## PATENT APPLICATION ASSIGNMENT

OFFS FILE NO. P/1071-1107

WHEREAS, we, Akira Ando, Masahiko Kimura and Takuya Sawada, as assignors, have invented certain improvements in PIEZOELECTRIC ELEMENT for which an application for United States Letters Patent has been executed by us of said even date herewith; and

WHEREAS, Murata Manufacturing Co., Ltd., Dept. A170, 26-10, Tenjin 2-chome, Nagaokakyo-shi, Kyoto-fu 617-8555, Japan as assignee, is desirous of acquiring all right, title and interest in and to said invention and any Patent that may be granted therefor.

NOW, THEREFORE, in consideration of One Dollar (\$1.00) and other good and valuable consideration, the receipt of which is hereby acknowledged, we, as assignors, hereby sell, assign and set over to said assignee the entire right, title and interest for the United States and all other countries in and to said invention and the aforesaid application for Patent, all original, divisional, continuation, substitute or reissue applications and patents applied for or granted therefor in the United States and all other countries, including all rights of priority from the filing of said application, and all rights for past infringement, and the Commissioner of Patents and Trademarks is hereby authorized and requested to issue all patents on said inventions or resulting therefrom to said assignee herein, as assignee of the entire interest therein; and the undersigned for ourselves and our legal representatives, heirs and assigns do hereby agree and covenant without further remuneration, to execute and deliver all divisional, continuation, reissue and other applications for Patent on said inventions and all assignments thereof to said assignee or its assigns, to communicate to said assignee or its representatives all facts known to the undersigned respecting said inventions, whenever requested, to testify in any interferences or other legal proceedings in which any of said applications or patents may become involved, to sign all lawful papers, make all rightful oaths, and to do generally everything necessary to assist assignee, its successors, assigns and nominees to obtain patent protection for said invention in the United States and all other countries, the expenses incident to said applications to be borne and paid by said assignee.

Date:

August 10, 2000Akira Ando

Akira Ando

Date:

August 11, 2000Masahiko Kimura

Masahiko Kimura

Date:

August 10, 2000Takuya Sawada

Takuya Sawada

LEGALIZATION RECOMMENDED